



NATIONAL  
CENTER  
FOR  
**RESEARCH**  
ON  
**GIFTED**  
**EDUCATION**

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University of Virginia



# **Research Update**

**February, 2016**



# Excellence Gaps



# the **PROBLEM**

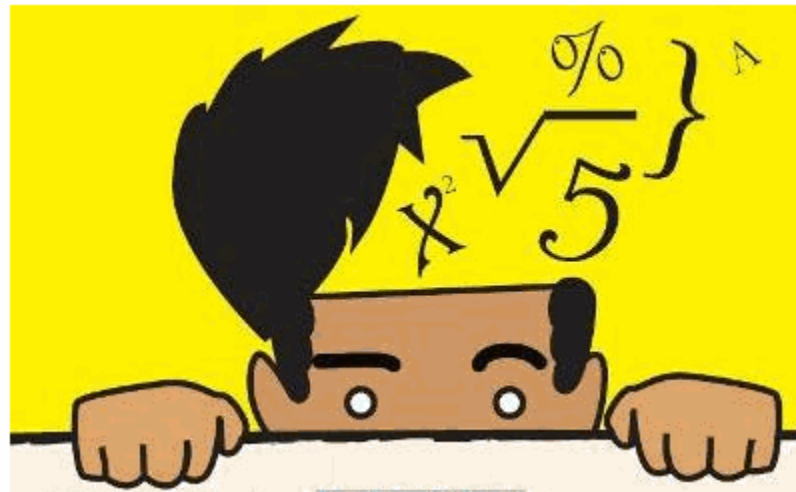


High ability students from underserved populations often perform at considerably lower levels on most academic outcomes compared to their more advantaged peers, creating **excellence gaps**

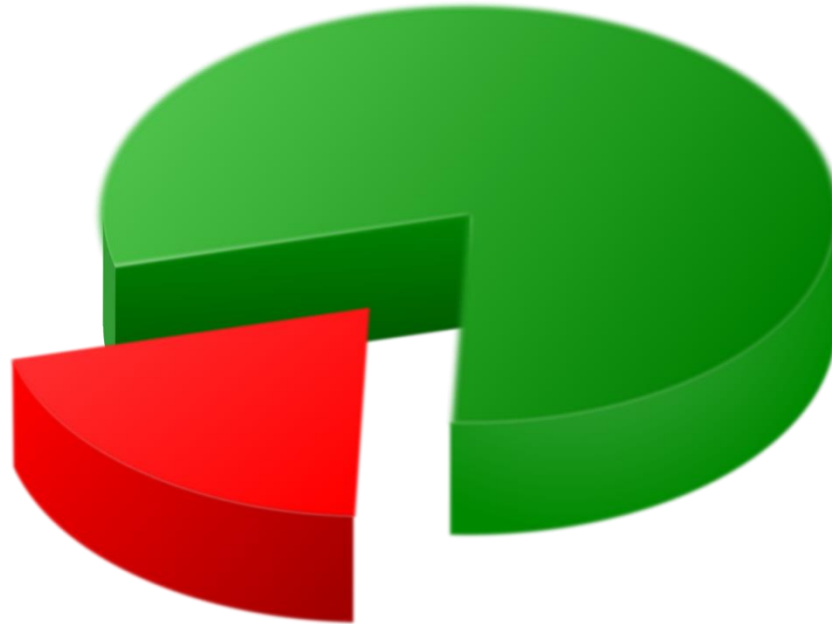
(Plucker, Burroughs, & Song, 2010)



# Excellence Gaps



# Representation



# Continuing Challenges



- General failure to identify and serve under-represented populations

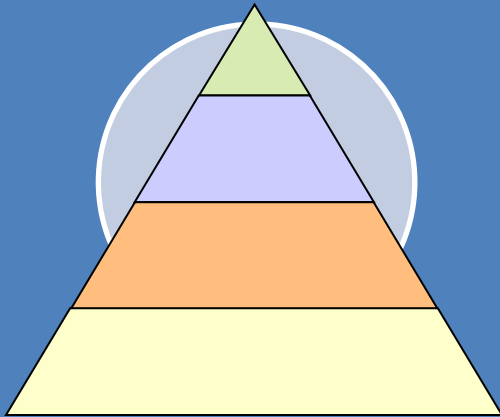


- Limited documentation of “what works”



It's only a  
**failure**  
if you don't  
**learn**  
something





Theory



Research



Practice





# Caveat

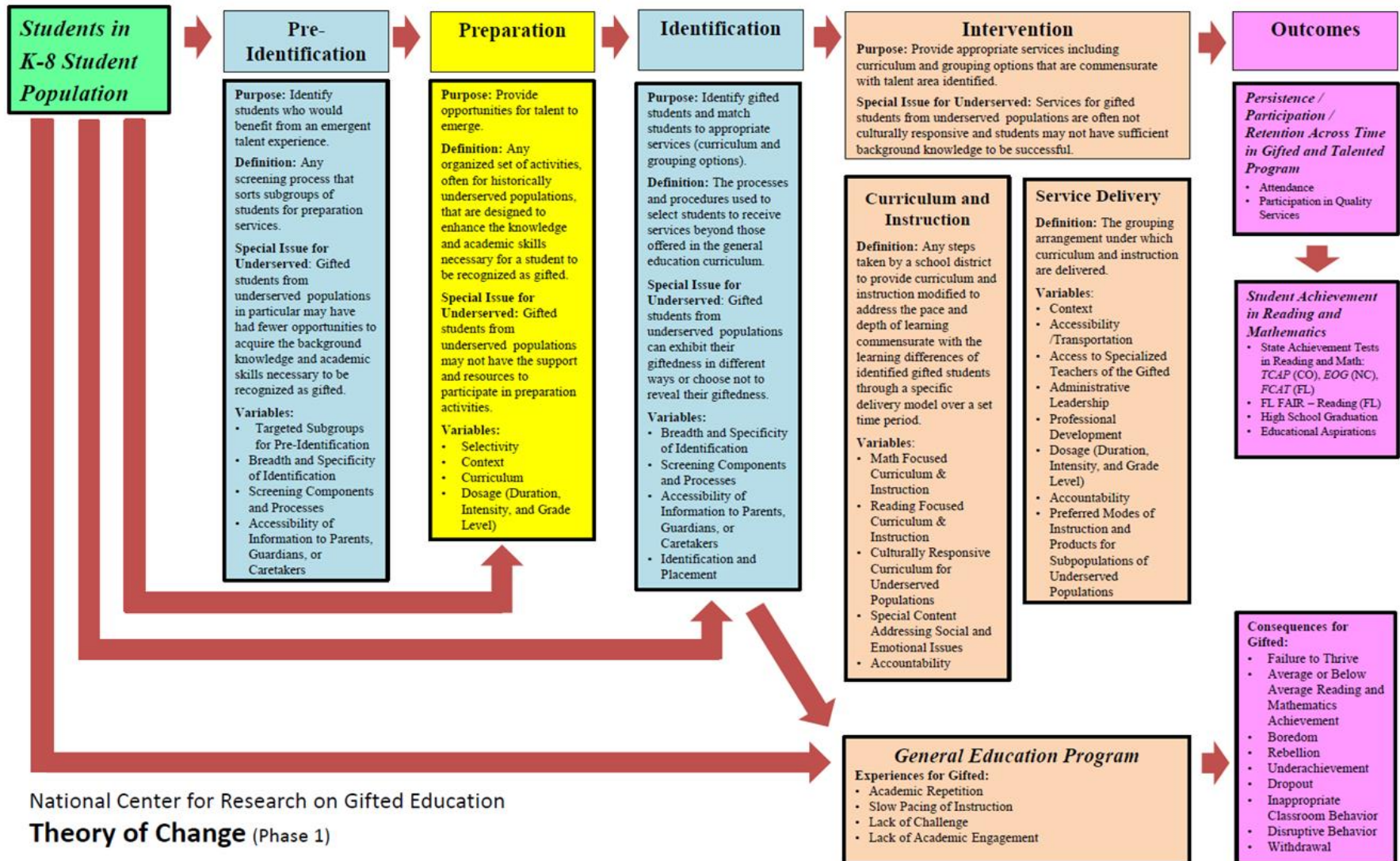
- Difficulty in synthesizing and generalizing



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# Theory of Change





# **Suggestions in the Literature**

**For Increasing Underserved Populations**



# Possibilities

- Consider Expanded Definitions of Gifted
- Use Checklist that Reflect Characteristics of Underserved Populations
- Conduct Periodic Assessments
- Consider Inadequate Preparation and Offer Preparation Programs for Screening
- Assess Student in Learning Opportunities
- Consider Nonverbal Measures
- Avoid Deficit Thinking
- Understand that Multiple Criteria is **OR** not **AND**
- Consider Excellence in Outside School Activities
- Be Aware of Stereotype Threat
- Value EL Interpreters
- Use Native Language
- Be Aware Who Approaches Parent or Guardian
- Offer Culturally Relevant Curriculum
- Offer Support Systems





# **Suggestions in the Literature**



**Of Barriers to Increasing Achievement  
and Success of Underrepresented  
Populations**



- isolation
- curriculum that is not relevant,
- instructional practices that are based on competition
- instruction that is culturally mismatched
- inattention to social relationship building, and
- stress of representing a particular group.

Moore, Ford, & Milner (2005)



# **Suggestions in the Literature**



**Of Interventions that May Increase  
Achievement and Success of  
Underrepresented Populations**

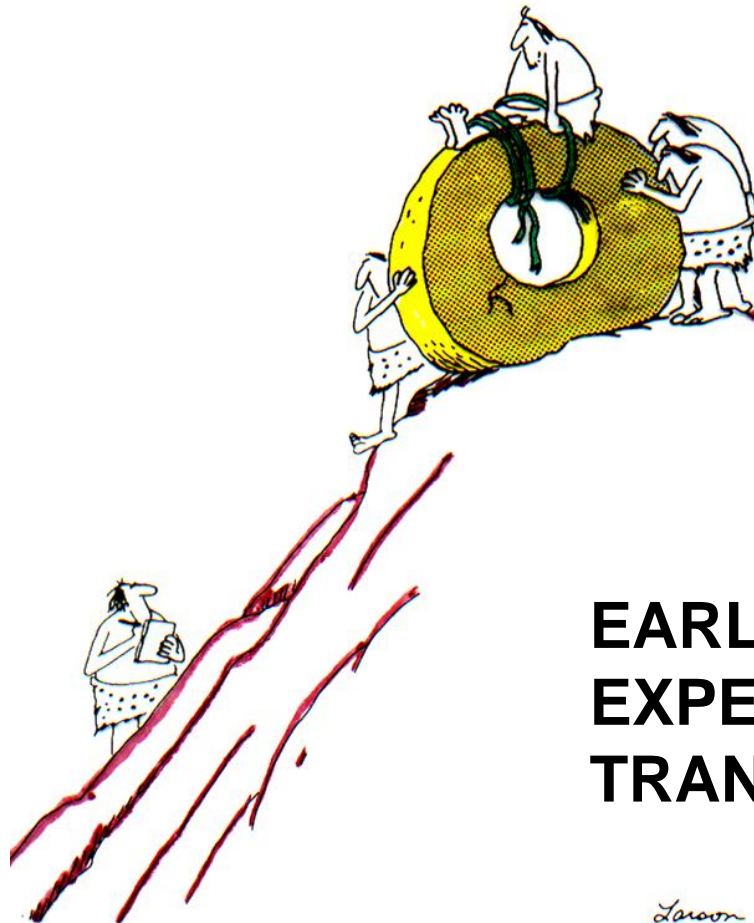




**“[F]indings suggest that a separate classroom environment is more effective for students selected on past achievement - particularly disadvantaged students who are often excluded from gifted and talented programs.  
”**



**Card & Giuliano, 2014**



# EARLY EXPERIMENTS IN TRANSPORTATION

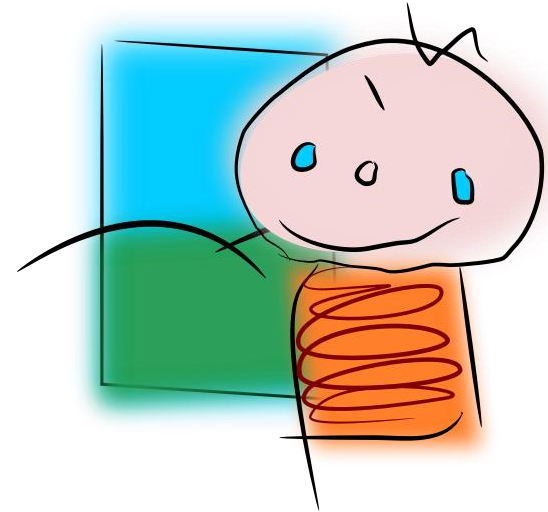
*Larson*

# **P** **romising** **ractices in** **Gifted Education** **for Underserved** **Populations**



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[www.ncrge.uconn.edu](http://www.ncrge.uconn.edu)



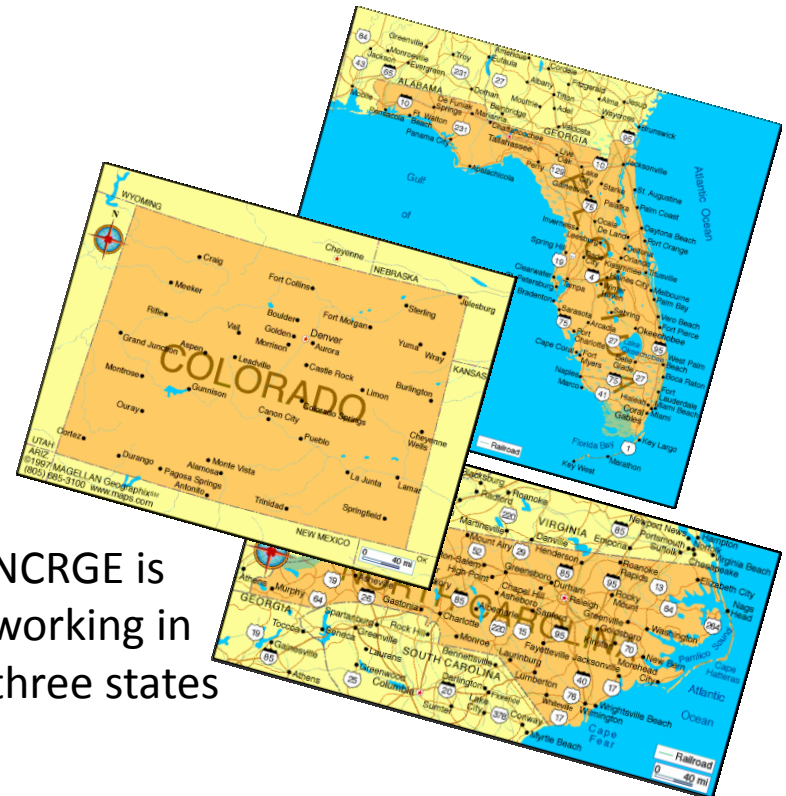
**T**he only way our country will reach its potential is if we help *all* our children reach their potential.

# the **GOAL**

...to increase our understanding of

1. Identification policies and procedures
2. Instructional approaches
3. Program curricula and content
4. Predictors of success

NCRGE is  
working in  
three states





**Why Colorado, Florida, and North Carolina?**

# THE PLAN

Year 1

- Analyze State District Gifted Education Plans
- Survey All Districts and Schools
- Analyze 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> Grade Student Reading and Mathematics Achievement for Current 7<sup>th</sup> Grade Students
- Identify Schools that Successfully Include and Serve Under-Represented Populations with Gifted Services

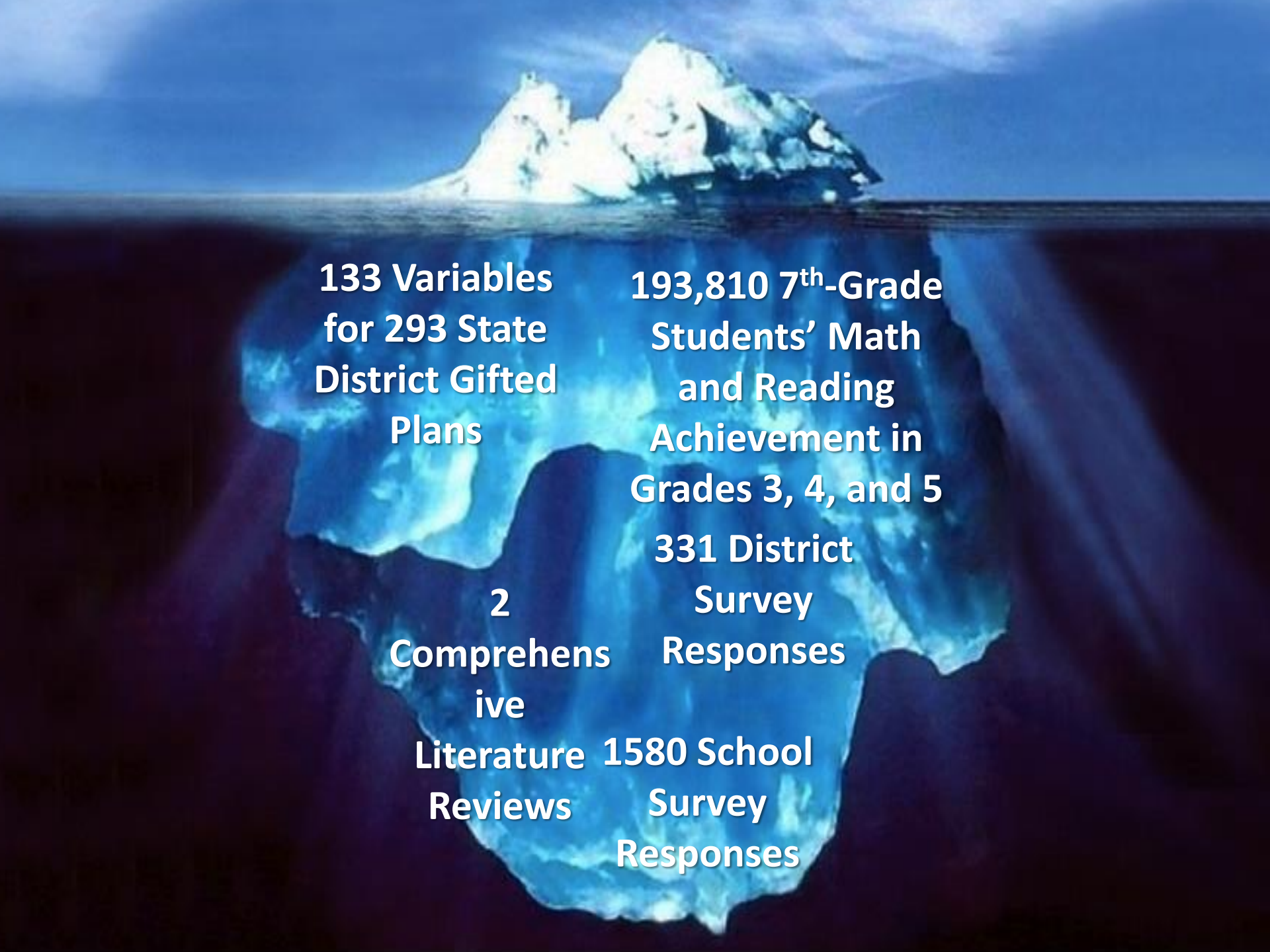
Year 2

- Conduct Case Studies of 24 Schools (8 in each of three states) to Determine Which Practices and Services are Most Effective

Year 3

- Develop a Randomized Controlled Trial to Test Findings from Case Studies



An iceberg floating in the ocean. The tip of the iceberg is above the water line, while the much larger base is submerged. The sky is blue with some clouds, and the water is dark blue. The iceberg itself is white and blue, with some internal textures visible.

**133 Variables  
for 293 State  
District Gifted  
Plans**

**193,810 7<sup>th</sup>-Grade  
Students' Math  
and Reading  
Achievement in  
Grades 3, 4, and 5**

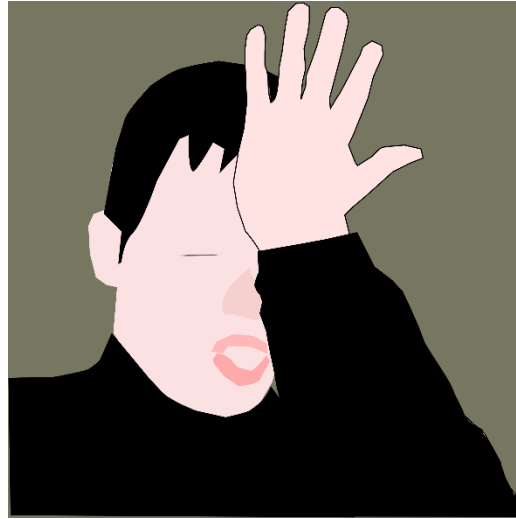
**2  
Comprehens  
ive**

**331 District  
Survey  
Responses**

**Literature 1580 School  
Reviews Survey**

**Responses**



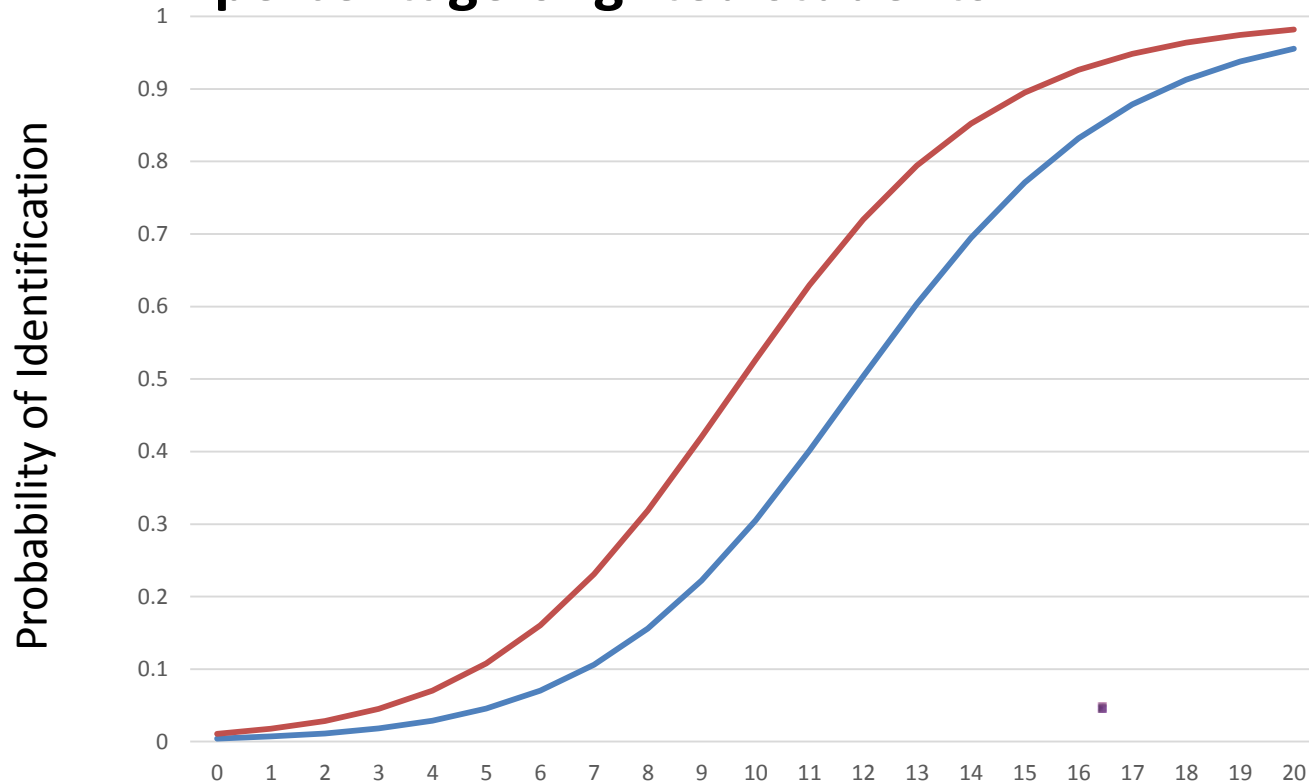


**How bad is the  
underrepresentation of  
underserved populations?**



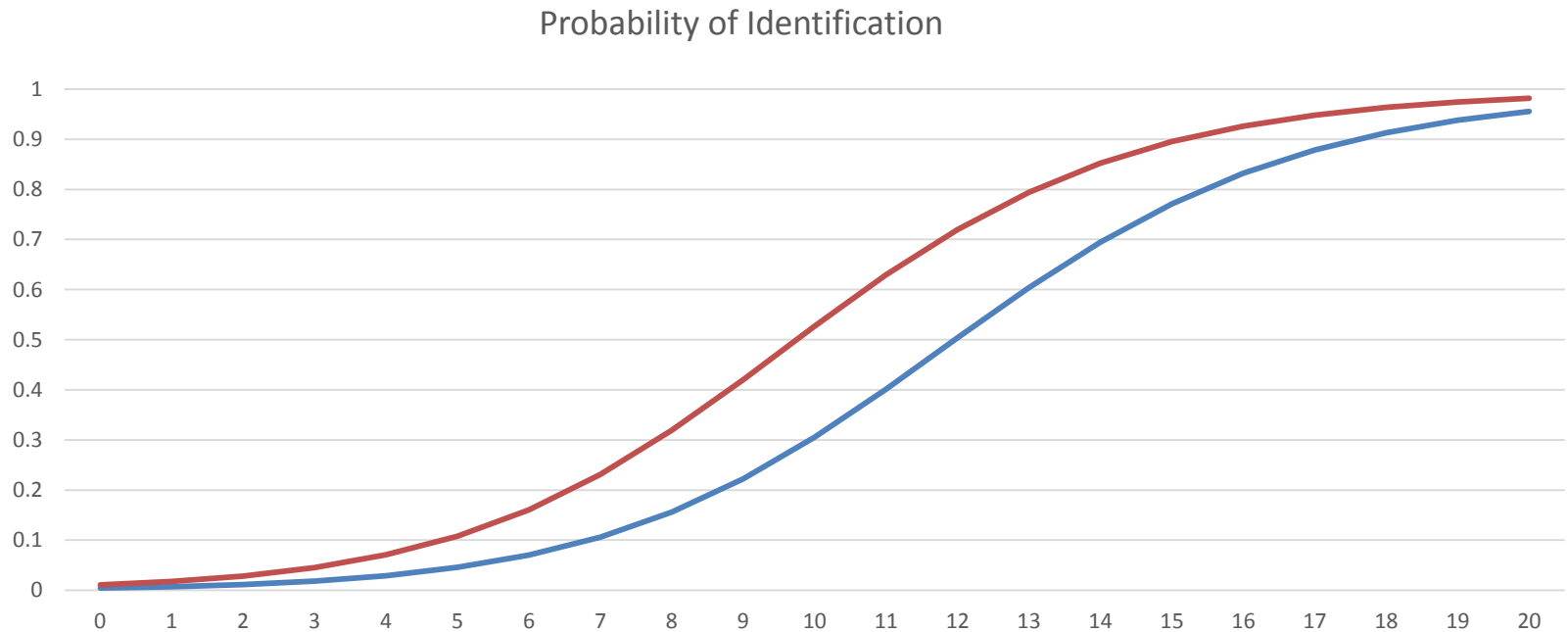
# Probability of identification as gifted in grade 4 for reference students and students who are EL, FRL, and UNDER after

**controlling for Reading and Math scores and school SES and school percentage of gifted students**



Points above the Mean in both reading and mathematics; *SD* is approximately 9.5 points

- 1. No gifted program in some schools with high numbers of underserved students**
- 2. High academic achievement isn't enough**
- 3. Students are not being nominated**



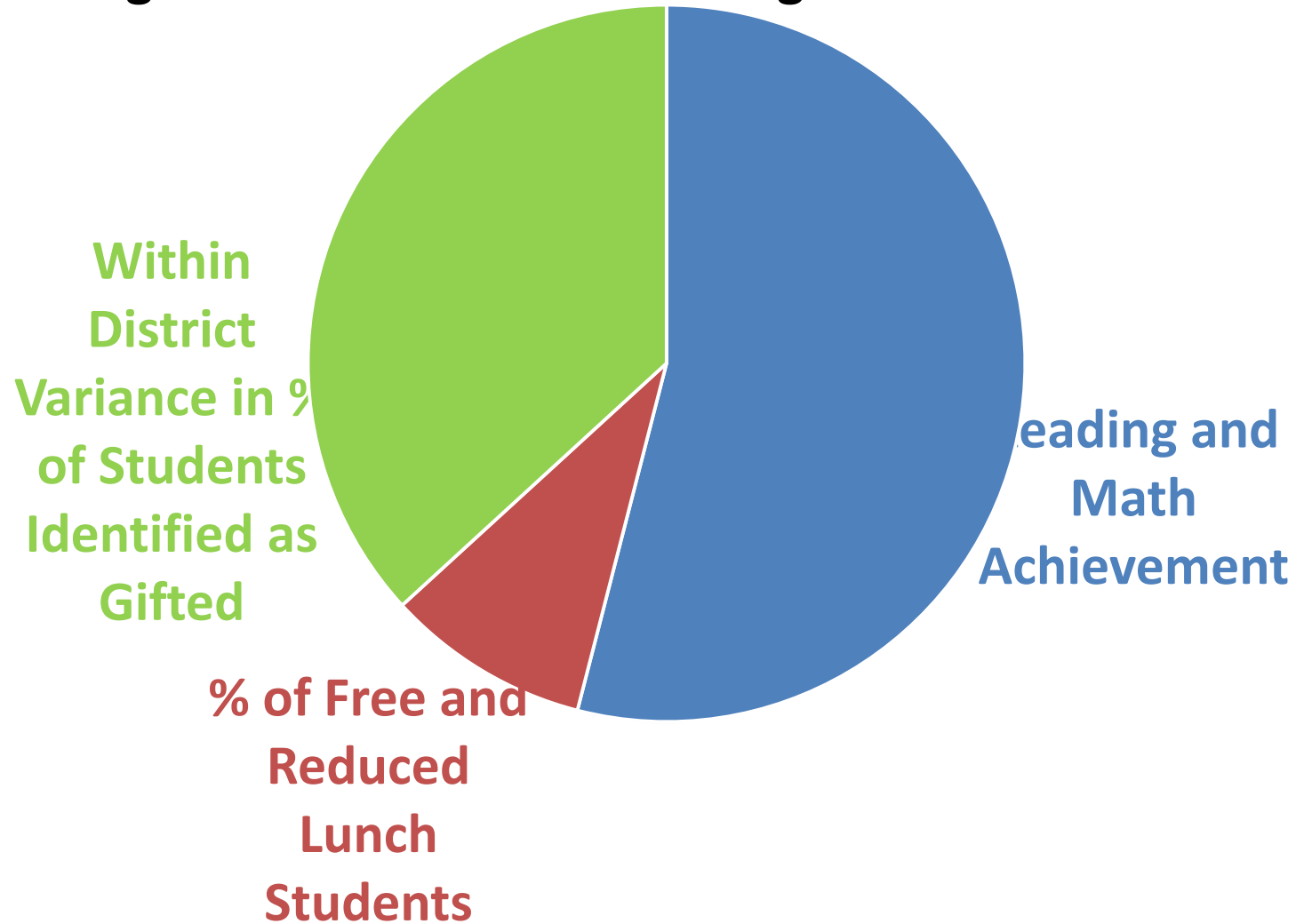
## Predicted probability of being identified as gifted for students from different demographic groups

	Logit	Odds	Probability	%
Reference	-1.88	0.15	0.13	13.23
Non-under/FRL	-3.13	0.04	0.04	4.18
Non-under/EL	-2.58	0.08	0.07	7.06
UNDER	-2.93	0.05	0.05	5.05
UNDER/FRL	-4.10	0.02	0.02	1.63
UNDER/EL	-3.63	0.03	0.03	2.58
UNDER/FRL/EL	-4.79	0.01	0.01	0.82
Non-under/FRL/EL	-3.83	0.02	0.02	2.13

What is the relationship between the % of free and reduced lunch students in a school and the % of students identified as gifted?



**The percentage of students in the school with free and reduced lunch predicts 20% of the residual within district variance (after controlling for reading and math scores) in the percentage of students identified as gifted and talented.**



## District Survey Results Support District Plan Analysis

Cognitive Ability Tests	94.3%
Teacher Nomination/Referral	93.4%
Achievement Tests	91.8%
Parent Nomination/Referral	84.9%
Teacher Ratings	77.0%
Student Work Samples	65.9%
Observation Tools	61.2%
Non-Verbal Assessment	57.7%
Performance-Based Assessment	47.0%
Self-Nomination	36.5%
Creativity Test Score	27.4%
Dynamic Assessment	4.4%

- **30.4% of schools do not accelerate**
- **36.0% of schools subject accelerate**
- **25.9% of schools whole grade accelerate**
  
- **71.6% of schools use pullout**
- **52.1% of schools use cluster grouping**
- **43.8% of schools use homogenous grouping**
- **32% of schools use push-in**
- **28.9% schools offer gifted reading/LA but 28.7% of them don't have specific reading/LA curriculum**
- **28.4% schools offer gifted mathematics but 24.2% of them don't have specific gifted math curriculum**
- **93.7% of districts do not have a designated math curriculum for gifted**
- **90.2% of districts do not have a designated reading/LA curriculum for gifted**

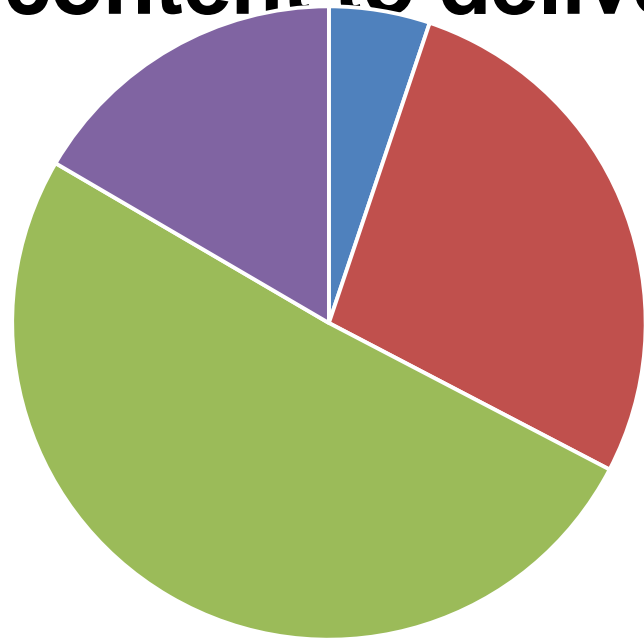




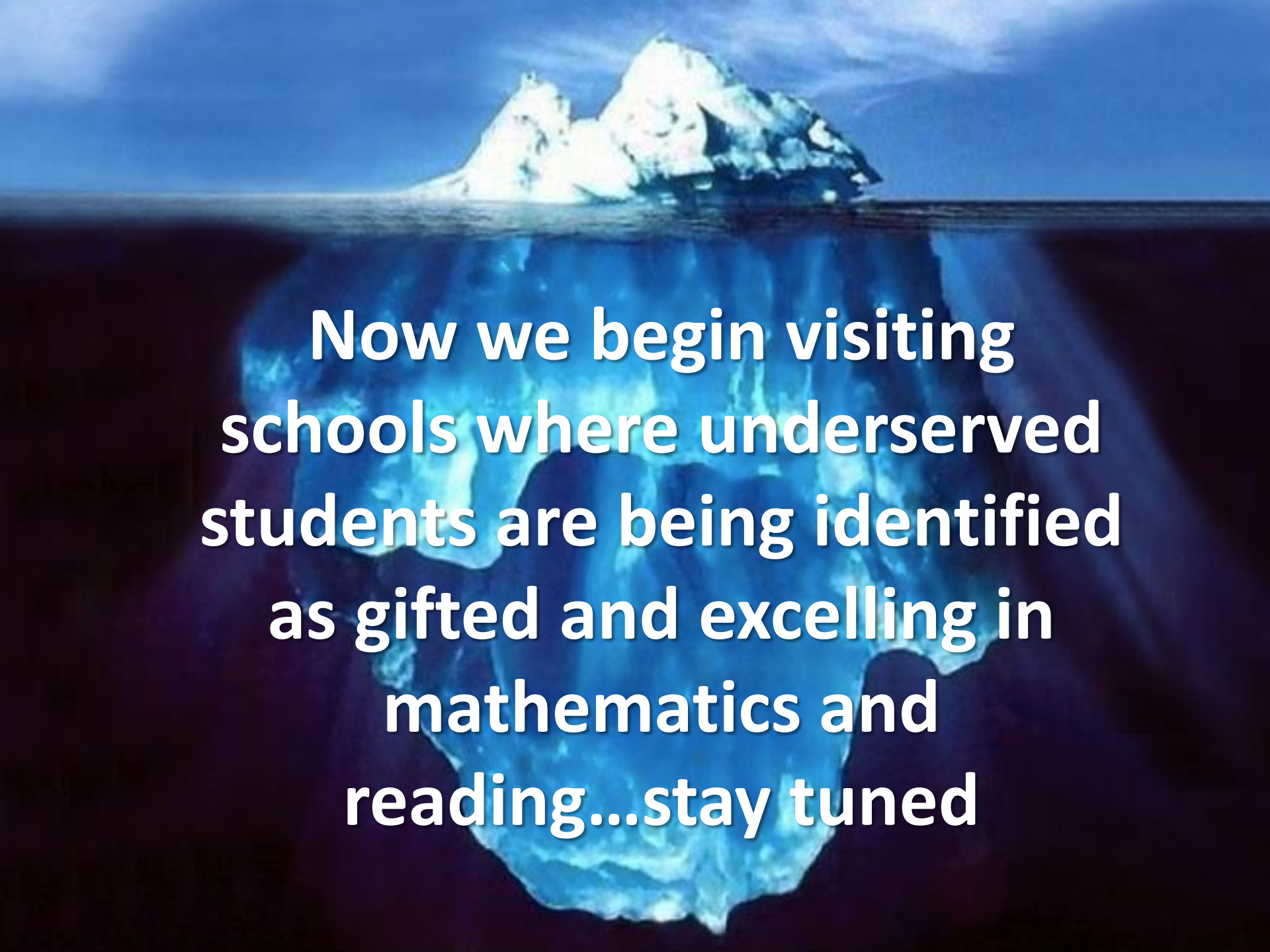
# Change is Possible

**How much autonomy do your school's teachers of the gifted have in choosing the content to deliver?**

**Very Little –  
5.1%  
Some –  
27.2%  
A Lot –  
50.2%  
Complete  
16.4%**



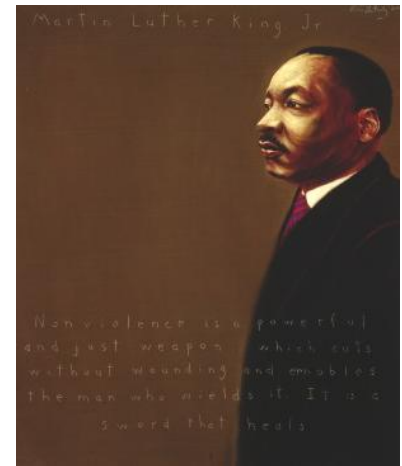
■ Very Little ■ Some  
■ A Lot ■ Complete

An iceberg floating in a dark blue ocean under a cloudy sky. The visible tip of the iceberg is small and jagged, while the submerged portion is much larger and more complex in shape, illustrating the concept of hidden potential or talent.

**Now we begin visiting  
schools where underserved  
students are being identified  
as gifted and excelling in  
mathematics and  
reading...stay tuned**

**Our lives begin to end  
the day we become  
silent about things  
that matter.”**

- Dr. Martin Luther King, Jr



# NCRGE

Research Group

## UConn

University of Connecticut:

**Dr. Del Siegle**, Director

**Dr. E. Jean Gubbins**, Associate Director

**Dr. D. Betsy McCoach**

**Dr. Rashea Hamilton**

**Dr. Rachel Chung**

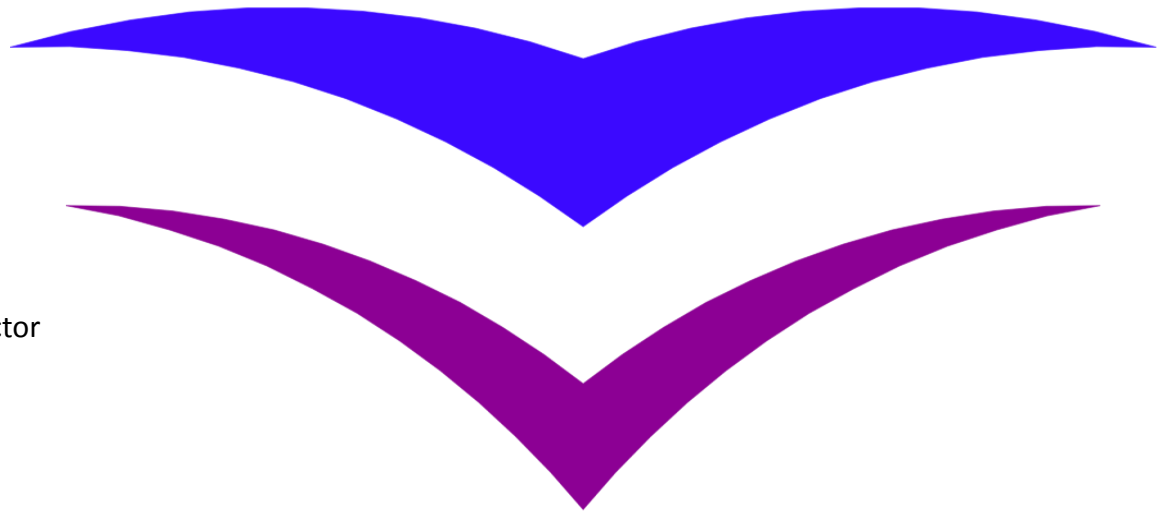
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**Dr. Bianca Montrosse-Moorhead**



**Dr. Carolyn M. Callahan**



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For an elaborated discussion of these topics see:

- Plucker, J. A., & Callahan, C. M. (2014). Research on giftedness and gifted education: Status of the field and considerations for the future. *Gifted Child Quarterly*, 80, 390-406.
- Card, D., & Giulaina, L. (2014). Does gifted education work? For which students? NBER Working Paper No. 20453. Issued in September 2014.
- Siegle, D., Gubbins, E. J., O'Rourke, P., Langley, S. D., Chung, R. U., Luria, S. R., Little, C.A., McCoach, D. B., Knupp, T., Callahan, C. M., & Plucker, J. A. (in press). Barriers to Underserved Students' Participation in Gifted Programs and Possible Solutions. *Journal for the Education of the Gifted*.

